DSHS – Economic Services Administration

General Assistance to the Unemployable

HIPAA Rule 1 Data Gap Analysis

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1 Executive Summary

1.1 Goal

Since all payers must support all electronic HIPAA transactions if they correspond to any of the payer's business processes, whether manual or electronic, GAU must support the following five HIPAA transactions:

834-Enrollment
278-Prior Authorization Request and Response
837P-Healthcare Claim - Professional
276/277-Claim Status Inquiry and Response

1.2 Method

The purpose of HIPAA Data Gap Analysis is to identify detailed programming/field-level issues which need remediation in order for GAU to be HIPAA compliant. The steps to accomplish this include:

1. Identify the DSHS administrations' business processes that correspond to HIPAA transactions
2. Perform data mapping (comparisons) between HIPAA transactions and legacy records
3. Identify and document the HIPAA data analysis gaps

1.3 Results

Five HIPAA business processes were identified for which data mapping should be done. All of these have been mapped and the results are documented here.

The major gaps are summarized as follows:

- Legacy name and address fields are too short for HIPAA.
- Much data in BarCode and SSSS systems cannot be used in HIPAA transactions. GAU experts will need to analyse what to do about this.
- For 834-Enrollment,
  - 5 HIPAA required data elements are not available,
  - 4 data elements need to be converted to standard coded values.
- For 837P-Professional Claim,
  - 15 HIPAA required data elements are not available,
  - 3 data elements need to be converted to standard coded values.
- For 278-Prior Authorization Response,
  - 7 HIPAA required data elements are not available,

  - 10 data elements from the request need to be stored and forwarded in the response,
  - 1 data element needs to be converted to standard coded values.
- For the 277 Claim Status Response,
  - 8 HIPAA required data elements are not available,
  - 5 data elements from the request need to be stored and forwarded in the response.

2 Identify Transactions (Step 1)

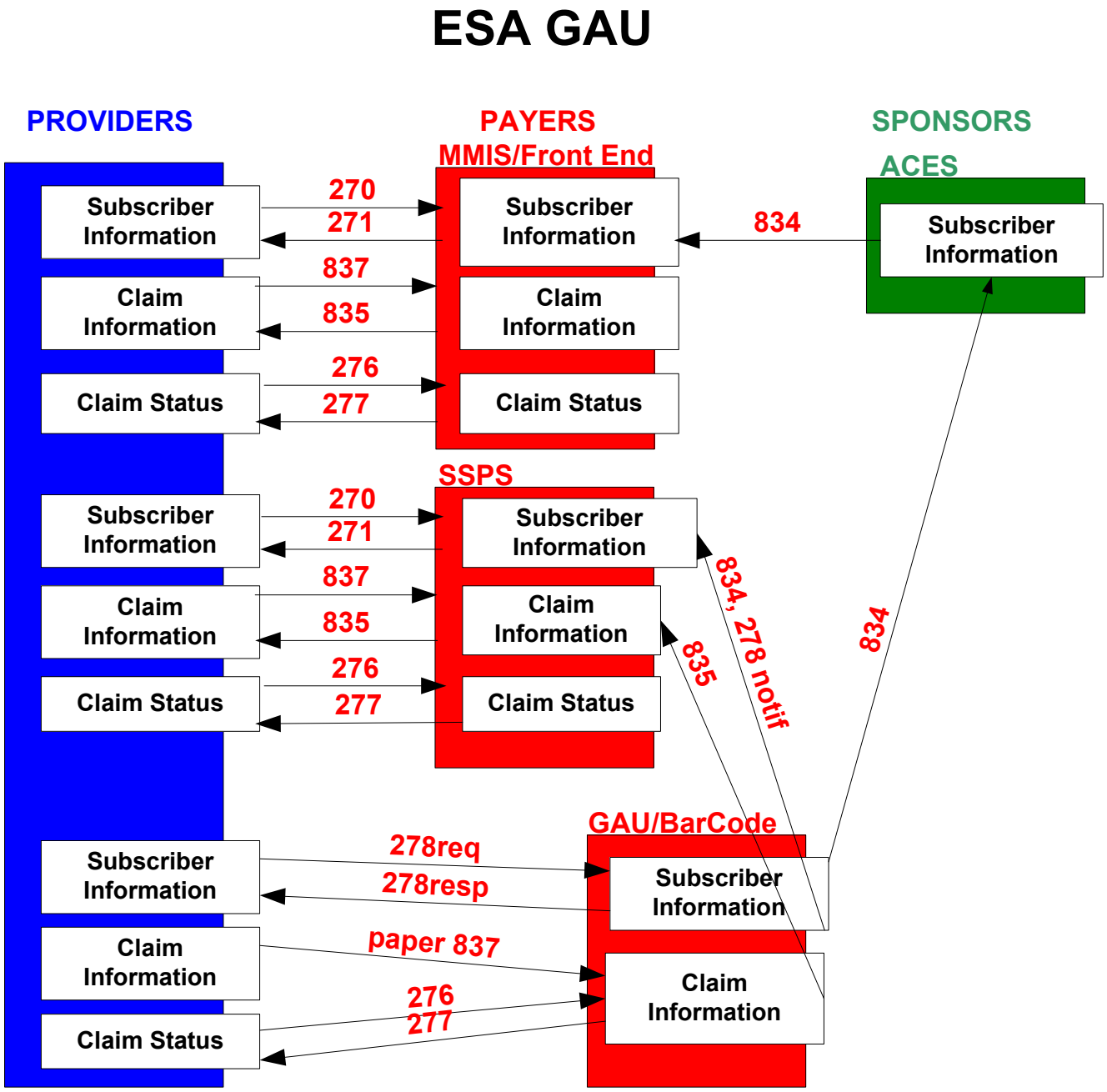
The first step is to identify which business processes must be HIPAA compliant, by comparing the HIPAA transactions (tx) descriptions with the business processes. This was partially accomplished by the Sierra business analysts and documented in their Deliverable I, and was refined during more recent discussions between Bruce Bower, GAU, and Francine Kitchen, HIPAA Consultant.

The following table shows a detailed step by step GAU HIPAA process analysis. The rows highlighted in yellow were mapped for this gap analysis. "DDE" indicates direct data entry.

Step	Description	Transaction	Comment
1	Client visits FEW, who enters demog DDE into ACES	demog DDE into ACES	not a HIPAA mandate
2	ACES sends demog to BarCode	275 (not HIPAA)	not a HIPAA mandate
3	Client visits ISW, who enters disability & provider DDE into Barcode	834 DDE into Barcode	DDE must follow HIPAA content
4	ISW notifies provider of authorization to assess disability	278 Notification	future HIPAA transaction, same as step 6
5	Provider renders services	none	
6	Provider requests ISW authorization for other diagnostic services	278 auth request/response to/from BarCode	HIPAA
7	Provider sends paper claim to ISW	paper claim to 837P Claim	HIPAA
8	ISW adjudicates & sends bill/claim to SSPS	SSPS auth rec to 837P	SSPS auth rec no longer needed; forward 837P Claim to SSPS
9	Provider requests claim status from ISW	276/277 to/from BarCode	HIPAA
10	ISW notifies FEW of enrollment	Barcode to 834	HIPAA (same map as step 3)
11	FEW enters enrollment into ACES	834 DDE into ACES	DDE must follow HIPAA content (see ACES analysis)
12	ACES sends enrollment to MMIS	834 from ACES to MMIS	HIPAA (see MMIS analysis)

FEW = Financial Eligibility Worker
ISW = Incapacity Social Worker

The following diagram shows a broader picture of the GAU business processes (and related systems) which correspond to HIPAA transactions.



3 Data Mapping (Step 2)

The second step of data gap analysis is to compare the HIPAA data elements to the legacy system data elements (fields). For example, if the administration's current information system will need to support a HIPAA claim status response, then it must contain a status code for each claim, because that is a required data element in the HIPAA transaction. The goal of data mapping is to identify:

- Where each legacy field will fit in the HIPAA transaction,
- Any HIPAA required data elements that are not stored in the legacy system,
- Any legacy system data elements that have no place to be sent in the HIPAA transaction,
- Any legacy system data elements that need to be longer to support HIPAA byte lengths,

A similar analysis must be done to identify all local codes that must be converted to standard codes. That was the responsibility of the Local Codes TAG (lead by Katie Sullivan), and is beyond the scope of this data mapping project.

In order to achieve the above data mapping goals, the following tasks were completed:

1. Identify which legacy system data records (tables) contain the relevant data elements for each transaction.
2. Load the legacy record layout (fieldnames, data types, byte lengths) into the gap analysis software/tool.
3. Match all the legacy record fields to a place to be sent in the HIPAA transaction, based upon HIPAA implementation guides and discussions with legacy system data content experts.
4. Identify any HIPAA required data elements that are not stored in the legacy system.
5. Document any known special processing logic that will be needed to convert data during implementation.
6. Generate a report out of the gap analysis tool to document all of the above.

The mapping reports that were generated should be used not only for gap analysis, but also for implementation (in conjunction with the HIPAA Implementation Guides). The mapping reports contain HIPAA data elements that are mapped to legacy fields with processing comments. For transactions involving a request and response, only the response was mapped, because all of the request fields are also contained in the response.

Filename	Description
R-HIPAA 834 to ESAgau mapped fields only.snp	834-Enrollment
R-HIPAA 837P to ESAgau mapped fields only.snp	837P-Professional Claim
R-HIPAA 278Response to ESAgau mapped fields only.snp	278-Response to Request for Prior Authorization
R-HIPAA 277 to ESAgau mapped fields only.snp	277-Claim Status Response

They are viewable, along with other administrations' mapping reports, from the MAA Intranet at:

http://maaintra.dshs.wa.gov/DSHSHIPAA/mapping.asp

4 Identify Gaps (Step 3)

This section lists all the data issues that should be addressed in order to comply with HIPAA Rule 1 for this administration, as well as is known based on discussions with administration representatives. Based on the data mapping described in the previous section, the following sections describe the data gaps discovered. In the following tables, "Transaction", "Loop", and "Segment" identify the position of the data elements within the HIPAA transactions.

4.1 Common Analysis for All Transactions

4.1.1 Legacy Fields Too Short for HIPAA

The following legacy fields are shorter than the length of the corresponding HIPAA data elements. HIPAA Rule 1 mandates that no data be truncated. So if data is received via a HIPAA transaction that is longer than the current field where it should be stored, AND that data would ever need to be sent back out in another HIPAA transaction, then the longer length must be accommodated.

Trans-action	Loop	Segment	HIPAA Data Element	HIPAA Length	Legacy Field Name	Legacy Length
All	All	NM103	Subscriber, Custodial Parent Last Name	35	Lname	35
All	All	NM103	Provider Parent Last Name, First Name, Middle Name	35 times 3	Name	30
All	All	NM103	Subscriber, Custodial Parent First Name	25	Lname	15
All	All	N302, 3	Subscriber, Provider Address Line	55	Street1, street2	30
All	All	N401	Subscriber, Provider City	30	City	22

4.1.2 Required Data That May be Defaulted or Derived

Some data elements were determined to be required under the HIPAA guidelines that do not have a corresponding data element on the current system, but are of such a nature that they may be defaulted or derived outside of the normal business process, that is, by the implemented software (clearinghouse, translator, etc.). The mapping spreadsheet contains notes about literals and default values that should be used in these cases. No gap is involved in these cases.

4.1.3 Legacy Data No Longer Used

Many data elements are currently provided by the legacy system, but are not included in the HIPAA transaction. Thus it will no longer be possible for GAU to provide this information for this transaction. GAU must determine for each of these, whether a work-around will be needed. Only the first line of multiple service line fields is listed here, since each service line will be handled the same. Only the BarCode and SSSS tables that contain HIPAA data are surveyed for this list.

Tablename	Columnname
BC-addrs	_sts_cd
BC-addrs	addr_type
BC-addrs	apt_num
BC-addrs	au_num
BC-addrs	cty_drctn_cd
BC-addrs	str2
BC-addrs	strt_drctn_cd
BC-addrs	strt_name
BC-addrs	strt_num
BC-addrs	strt_type_cd
BC-addrs	strt1
BC-addrs	strt2
BC-addrs	sypstd_dt
BC-addrs	zip5
BC-aus	aces_ofc_num
BC-aus	appl_elig_ovrrid_dt
BC-aus	au_cvrg_grp_sypstd_dt
BC-aus	au_num

BC-aus	au_prog_type_sypstd_dt
BC-aus	au_sts_sypstd_dt
BC-aus	btch_cyc_dt
BC-aus	conv_sts_cd
BC-aus	cso_num
BC-aus	curr_fw_user
BC-aus	deem_hh_size
BC-aus	deem_liv_arngmt_cd
BC-aus	deem_resrc_amt
BC-aus	deem_type_cd
BC-aus	delay_reas_cd
BC-aus	exp_dt
BC-aus	full_grant_amt
BC-aus	gross_ei_amt
BC-aus	gross_ui_amt
BC-aus	indian_cntry
BC-aus	intake_beg_dt
BC-aus	intvw_tm
BC-aus	intvw_user
BC-aus	itis_case_num
BC-aus	last_del
BC-aus	med_cvrg_group_cd
BC-aus	meds_bhp_plus_ind
BC-aus	msg_phone
BC-aus	net_ei_amt
BC-aus	net_income_amt
BC-aus	net_ui_amt
BC-aus	normal_purge
BC-aus	ofc_num
BC-aus	pd_thru_dt
BC-aus	pl_code
BC-aus	prog_type_cd
BC-aus	res_phone
BC-aus	rr_beg_dt
BC-aus	rr_prd_end_dt
BC-aus	rr_prd_est
BC-aus	shelter_expense_amt
BC-aus	slam_ind
BC-aus	sts_cd
BC-aus	sts_dt
BC-aus	sts_reas_cds
BC-aus	tot_shelter_expense_amt
BC-aus	tot_util_expense_amt
BC-aus	tr_from_au
BC-aus	trm_digit
BC-aus	util_expense_amt
BC-aus	washcap_ind
BC-clients	aces_data
BC-clients	alias_num
BC-clients	btch_cyc_dt
BC-clients	close_dt
BC-clients	confidential
BC-clients	dcl_alien_citiz_cd
BC-clients	educ_lvl_cd
BC-clients	educ_yrs
BC-clients	hcb_type_cd
BC-clients	iara_dt
BC-clients	indian_res_ind
BC-clients	intrprtr_ind
BC-clients	liv_arngmnt_type_cd
BC-clients	ltc_unc_med_exp_type_cds
BC-clients	merge_to_cl_num
BC-clients	natv_am_cd
BC-clients	preg_due_dt
BC-clients	refugee_ind_ca
BC-clients	refugee_ind_fs

BC-clients	rfg_entry_sts_cd
BC-clients	rfg_entry_sts_dt
BC-clients	shelter_exp_amt
BC-clients	spnsh_hspnc_orgn_cd
BC-clients	ssn_clm_num
BC-clients	tot_out_st_60_mo_cnt
BC-clients	tot_tanf_60_mo_cnt
BC-clients	trm_digit
BC-clients	unused
BC-clients	worksource
BC-names	alias_num
BC-names	cl_num
BC-names	is_prim
BC-names	namedob
BC-names	non_aces
BC-sites	admin
BC-sites	allowed_accesses
BC-sites	branch
BC-sites	compat_ver
BC-sites	dbflags
BC-sites	def_unit
BC-sites	division
BC-sites	doc_batches_dir
BC-sites	doc_default_cc
BC-sites	doc_default_cso_worker
BC-sites	doc_default_fs
BC-sites	doc_default_is
BC-sites	doc_default_ssif
BC-sites	doc_permanent_dir
BC-sites	doc_reindex_site
BC-sites	dpi
BC-sites	dstrct_list_dt
BC-sites	due_101s
BC-sites	ebt_alt_addr_ind
BC-sites	icms_sup
BC-sites	limited
BC-sites	line_space
BC-sites	min_ver
BC-sites	narrow_dots
BC-sites	nice_101s
BC-sites	org_code
BC-sites	qa_catchment
BC-sites	qa_unit
BC-sites	recc_ver
BC-sites	region
BC-sites	regional_access
BC-sites	rptd_ver
BC-sites	ru_num
BC-sites	site_accesses
BC-sites	site2
BC-sites	site3
BC-sites	space_incr
BC-sites	transf_desk_phone
BC-sites	wide_dots
BC-sites	wkr_names
branches	branch
branches	fax_num
branches	mailstop
branches	site
SSSS-incapacity	barriers
SSSS-incapacity	cl_num
SSSS-incapacity	close_code
SSSS-incapacity	close_dt
SSSS-incapacity	current_due
SSSS-incapacity	date_of_req
SSSS-incapacity	gax_approved

SSSS-incapacity	ia_signed
SSSS-incapacity	incap_num
SSSS-incapacity	incap_review
SSSS-incapacity	intake_date
SSSS-incapacity	next_review
SSSS-incapacity	pep_decision
SSSS-incapacity	program
SSSS-incapacity	ref_to_eval
SSSS-incapacity	ref_to_ssi
SSSS-incapacity	review_type
SSSS-medical_providers	med_num
SSSS-medical_providers	med_type
SSSS-medical_providers	ofc_num

4.2 834 – Enrollment

A sponsor must be able to support HIPAA electronic enrollment.

4.2.1 834: HIPAA Required Data Not Available From Legacy System

The following data elements are required under the HIPAA guidelines, but not currently available on the DASA system. These data elements must either be developed, derived or defaulted in order for the resultant transaction to be HIPAA compliant.

Loop	Seg-ment	Data Element	Comment
Sponsor	N104	Sponsor Identifier	Need a Tax ID for GAU or ESA
Payer	N104	Insurer Identifier Code	Need DSHS SSPS Tax ID
Member	INS03	Maintenance Type Code	"011"-change; "021"-add; "024"-terminate; "030"-roster
Member	REF02	Prior Coverage Months	Must track number of prior coverage months
Coverage	HD01	Maintenance Type Code	001-change, 002-delete, 021-add, 024-term, 025-reinstate, 026-correction, 030-audit

4.2.2 834: Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements.

Based upon our analysis of the current Refugee Assistance business process, the following code sets need to be converted to standard coded values.

Loop	Segment	Data Element	Legacy Field	HIPPA Code Set
Member	DMG04	Marital Status Code	Clients/mrtl_sts_cd	See Guide
Member	DMG05	Race or Ethnicity Code	Clients/race_cd	See Guide
Member	DMG06	Citizenship Status Code	Clients/citiz_cd	See Guide
Member	LUI02	Language Code	Clients/prim_lang_cd	See external code set noted in map

4.2.3 834: Looping

HIPAA transaction formats contain complex looping structures to allow repetition of sets of related data. The software that parses the incoming 834 transaction will need to accommodate optionally:

- Multiple members for each sponsor to payer transaction
- Multiple health coverage plans/programs for each member
- Multiple primary care providers for each health coverage plan

4.3 837P – Healthcare Claim - Professional

Payers must support the HIPAA electronic claim transaction. The Professional claim is used for billing professional services (usually individual provider services which tend to be based on individual procedures), as opposed to institutional services (which tend to be based on time periods and require admission data unless they're outpatient institutional services).

4.3.1 837P: HIPAA Required Data Not Available From Legacy System

The following data elements are required under the HIPAA guidelines, but not currently available on the GAU system. These data elements must either be developed, derived or defaulted in order for the resultant transaction to be HIPAA compliant.

Loop	Segment	Data Element	Comment
Header	BHT04	Transaction Set Creation Date	Claim Date (default to transaction sent date?)
Receiver	NM109	Receiver Primary Identifier	Need a local ID for GAU
Billing Provider	NM109	Billing Provider Identifier	Need a Tax ID or NPI for provider
Claim	CLM05	Claim Frequency Code	Generate code for: "1"-orig, "6"-corrected, "7"-replace, "8"-void
Claim	CLM06	Provider Signature Indicate	Y/N is provider's signature on file?
Claim	CLM09	Release of Information Code	Y/N patient authorized medical data to others?
Claim	CLM10	Patient Signature Source Code	Where is signature if CLM09=Y
Claim	CLM11	Related Causes Code	Required if accident of work related
Claim	DTP03	Accident Date	Required if accident related
Claim	REF02	Prior Authorization Number	GAU must send an authorization number in the 278, and get it back in the 837
Service	SV101-2	Procedure Code	Need a HCPCS code for disability assessment or specific diagnostic procedures
Service	SV102	Line Item Charge Amount	

Service	SV103	Unit or Basis for Measurement Code	
Service	SV104	Service Unit Count	
Service	SV107	Diagnosis Code Pointer	
Service	DTP03	Service Date	

4.3.2 837P: HIPAA Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements. Based upon our analysis of the current GAU business process, GAU should convert to the following standard code sets.

Loop	Seg-ment	Data Element	Legacy Field	HIPPA Code Set
Billing Provider	NM109	Billing/Rendering Provider Identifier	Gax_doctors/doc_num, medical_providers/provider_num	Need a standard ID (NPI, SSN, EIN), not just the local ID
Claim	HI01	Diagnosis	Incapacity/prim_incap, sec_incap, chemical_asmt	Generate ICD9 code
Service	SV101	Procedure Code	Paper Claim: 36-service code	Map to HCPCS codes

4.3.3 837P: Looping

HIPAA transaction formats contain complex looping structures to allow repetition of sets of related data. The software that parses the incoming transaction will need to accommodate optionally:

- Many billing providers in one transaction (no upper limit),
- Many clients for each billing provider (no upper limit),
- Up to 100 claims for each client,
- Up to 50 service line items for each claim.

4.4 278 Response to Request for Prior Authorization

A sponsor must be able to support a HIPAA response to a HIPAA request for prior authorization for providers. Only the 278 Response was mapped, because all the 278 Request data elements are also present in the 278 Response.

4.4.1 278Rsp: HIPAA Required Data Not Available From Legacy System

Loop	Segment	HIPAA Data Element	Comment
UMO	NM109	UMO Identifier	Need a local ID for GAU or ESA
UMO	PER04	UMO Contact Number	Need a contact phone number for GAU
Service	HCR01	Action Code	"A1"-cert'd, "A3"-not certified, "A4"-pend, 'A6"-modified, "CT"-contact payer, "NA"-no action required

Service	HCR02	Certification Number	Authorization Number required, if authorized
Service	HCR03	Reject Reason Code	Standard code needed if not authorized
Service	DTP03	Proposed or Actual Service Date	Required if in request or authorized for specific dates
Service	HI01-2	Procedure Code	Need a HCPCS code for disability assessment and requested diagnotic procedures

4.4.2 278Rsp: Store Data From Request

The following data must be stored from the incoming 278 request and returned in the response.

Loop	Segment	HIPAA Data Element	Comment
Header	BHT03	Submitter Transaction ID	Unique ID for submitter's request
Requester	NM1	Requester Name and ID	Store and return entire segment
Requester	PRV	Requester Provider Information	Store and return entire segment
Subscr.	DTP	Accident Date	
Subscr.	TRN02, TRN03	Patient Event Tracking Number	
Subscr.	HI	Principal Diagnosis	Store and return entire segment
Service Provider	NM1	Service Provider Name and ID	Store and return entire segment
Service Provider	N3, N4	Service Provider Address	Store and return entire segment
Service	TRN02, TRN03	Service Trace Number	
Service	UM	Health Care Services Review Information	Store and return entire segment

4.4.3 278Rsp: HIPAA Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements. Based upon our analysis of the current GAU business process, the following fields need to be convert to standard code sets.

Loop	Segment	Data Element	Legacy Field	HIPPA Code Set
Claim	HI	Subscriber Diagnosis	Incapacity/prim_incap Incapacity/sec_incap Incapacity/chemical_asmt	Generate ICD9 code

4.4.4 278Rsp: Looping

HIPAA transaction formats contain complex looping structures to allow repetition of sets of related data. The software that parses the incoming 837 transaction will need to accommodate optionally:

- Multiple UMOs in each transaction (if routed through clearinghouse),
- Multiple requestors for each UMO,
- Multiple subscribers for each requestor,
- Multiple dependents for each subscriber,
- Multiple service providers for each patient,
- Multiple service lines for each service provider.

4.5 276/277 – Claim Status Request/Response

Payers must support the HIPAA electronic claim status request and response transaction. Only the 277 Response was mapped, because all the 276 Request data elements are also present in the 277 Response.

4.5.1 277: HIPAA Required Data Not Available From Legacy System

The following data elements are required under the HIPAA guidelines, but not currently available on the GAU system. These data elements must either be developed, derived or defaulted in order for the resultant transaction to be HIPAA compliant.

Loop	Segment	Data Element	Comment
Info. Source	NM109	Payer Identifier	Need a local ID for GAU
Claim	STC01-1	Healthcare Claim Status Category Code	Generate a standard code for claim status category
Claim	STC01-2	Healthcare Claim Status Code	Generate a standard code for claim status
Claim	STC04	Total Claim Charge Amount	Keep history of amount charged
Claim	STC05	Claim Payment Amount	Keep history of amount paid
Claim	STC07	Payment Method Code	
Claim	STC09	Check or EFT Trace Number	Required if paid; keep history
Claim	DTP03	Claim Service Period	Either this or line service date is required

4.5.2 277: Store Data From Request

The following data used in the 277 Response should be stored and returned from the 276 Request or the 837 Claim. These are cases where entire segments should be stored and returned.

Loop	Segment	Data Element	Comment
Info Receiver	NM1	Information Receiver Name and ID	Store and return entire segment
Service Provider	NM1	Service Provider Name and ID	Store and return entire segment
Claim	TRN	Claim Submitter Trace Number	
Claim	STC04	Total Claim Charge Amount	

Claim	DTP03	Claim Service Period	

4.5.3 277: HIPAA Code Set Usage

Beyond the format and data elements that must be used, the implementation guides for the HIPAA transaction dictate the required code sets to be utilized in certain data elements. Based upon our analysis of the current GAU business process, there are no currently used fields that need to convert to standard code sets. Use of HIPAA code sets are in new fields to be created and in fields to be stored and returned from the request—these are documented in the two previous sections.

4.5.4 277: Looping

HIPAA transaction formats contain complex looping structures to allow repetition of sets of related data. The software that parses the incoming transaction will need to accommodate optionally:

- Multiple information sources (payers) in one transaction,
- Multiple information receivers for each information source,
- Multiple service providers for each information receiver,
- Multiple subscribers for each service provider,
- Multiple dependents for each subscriber,
- Multiple claims for each client,
- Multiple service line items for each claim.